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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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04/25/2007

Herwig Fischer

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10/01/2009

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EXAMINER

BISHOP, ERIN D

ART UNIT

PAPER NUMBER

3655

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/587,813	FISCHER, HERWIG	
	Examiner	Art Unit	
	ERIN D. BISHOP	3655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

3. The drawings are objected to because Figs. 1, 3, and 4 have multiple views which should have different figure labels. See 37 CFR 1.84(u)(1).
4. The drawings are objected to because the claimed elements are not clearly shown in the figures. For example, in fig. 1, the multiple overlapping hidden lines make it unclear what is being shown, and the lead lines are unclear.

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5. The drawings are objected to because, in fig. 1, section A–A, the crosshatch symbol used to designate what appears to be tooth ring 11 is not universally known. See 37 CFR 1.84(n).

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the flattened pins (claim 7, line 6) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

For example, on pg. 1, line 3, the element "a rotating shift transmission" is unclear.

Also for example, on pg. 5, lines 18-19, element "can be set eccentric positions" should be corrected to --can be set to eccentric positions--, etc.

8. The disclosure is objected to because of the following informalities:

on pg. 7, line 19, reference character "15" has been used to designate planetary gears 13.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Regarding claim 1, line 2, the phrase “a rotating *shift* transmission” renders the claim indefinite because the term is not consistent with the terms generally used in the art, and it is unclear what is being claimed.

Regarding claim 1, line 2, the phrase “integrated freewheels” renders the claim indefinite because it is unclear what the integrated freewheels encompass.

Regarding claim 1, lines 3-5, the phrase “input and output elements that as a result of displacement in a plurality of *concentric* positions...create varying gear ratios” renders the claim indefinite because it is unclear how the input and output elements displaced in *concentric* positions create different gear ratios.

Regarding claim 1, line 8, the phrase “a tooth ring” renders the claim indefinite because it appears to be a double inclusion of the at least one tooth ring previously recited (line 6).

Regarding claim 2, line 5, the phrase “radial segments preferably mutually meshing” renders the claim indefinite because it is unclear how the radial segments mutually mesh.

Regarding claim 3, line 4, the phrase “the other end” renders the claim indefinite because it lacks antecedent basis.

Regarding claims 3, 7, and 8, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is

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considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instances:

claim 3, lines 3-4, recites the broad recitation "configured in a multi-level...manner," and the claim also recites "configured...preferably double-level manner" which is the narrower statement of the range/limitation;

claim 7, lines 5-6, recites the broad recitation "a free rotatory design," and the claim also recites "preferably due a multi-part configuration" which is the narrower statement of the range/limitation;

claim 8, lines 3-5, recites the broad recitation "guides the or each tooth ring in a torsionally flexible, radial and plane parallel manner," and the claim also recites "preferably via a rubber ring" which is the narrower statement of the range/limitation.

Regarding claim 5, lines 3-4, the phrase "the pins of the rotor" renders the claim indefinite because it lacks antecedent basis.

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Regarding claim 6, lines 3-5, the phrase “disposed asymmetrically such that a wider bending carrier is created in the direction of torque transmission and a flatter bending carrier in the idle direction” renders the claim indefinite because it is unclear what a wider bending carrier, a flatter bending carrier encompass.

Regarding claim 6, line 5, the phrase “the idle direction” renders the claim indefinite because it lacks antecedent basis.

Regarding claim 7, line 2, the phrase “the pins” renders the claim indefinite because it is unclear which pins are being referred to.

Regarding claim 7, line 2, the phrase “the pins can rotate freely on the flanges” renders the claim indefinite because it is unclear how they can rotate on the flanges.

Regarding claim 7, line 6, the phrase “the pins preferably being flattened” renders the claim indefinite because it is unclear how the pins are flattened.

Regarding claim 7, line 9, the phrase “the entire surface” renders the claim indefinite because it lacks antecedent basis.

Regarding claim 8, line 3, the phrase “the or each tooth ring” renders the claim indefinite because it is unclear. It appears the claim should read --the at least one tooth ring--.

Regarding claim 9, lines 3-6, the phrase “a gear stage may comprise two or more parts that are disposed mutually axially offset, with adjoining planetary gears being part of different parts and preferably comprising separate spring systems” renders the claim indefinite because it is unclear.

Claims 2-9 are also rejected as being dependent from a rejected base claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-9, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Meucci, U.S. Patent 4,114,466.

Regarding claim 1, as best understood, Meucci discloses a planetary-gear transmission configured as a rotating shift transmission with integrated freewheels (see fig. 8), comprising

input and output elements that as a result of displacement in a plurality of concentric or eccentric positions create varying gear ratios and of which one is configured as a ring gear with at least one tooth ring (toothed rim 81, fig. 8) and the other is configured as a rotor (rotary body 97, fig. 8),

rotating planetary gears (free wheel devices 103, fig. 8) with tooth profiles being coupled positively to a tooth ring (see fig. 8) and

in the coupled state torque being transmitted from the input element to the output element (see fig. 8), characterized in that

each planetary gear is connected to the rotor via a radial segment (arms 101, fig. 8) that is disposed rotatably about an axle it has in common with the rotor (see fig. 8).

Regarding claim 2, as best understood, Meucci discloses the radial segments are tapered in the axial direction in the area of the axle (arms 101 are tapered in the axial direction near pivots 101A, fig. 7) and offset from the respectively adjoining radial segments (each arm 101 is radially offset from the other arms 101. fig. 8), the radial segments preferably mutually meshing, preferably in the area of the axle (arms 101 are mutually nested on body 97, fig. 8).

Regarding claim 3, as best understood, Meucci discloses the radial segments are configured in a multi-level, preferably double-level manner on the axle and/or the other end (arms 101 are configured in a double-level manner on both the inner radial portion and the outer radial portion, fig. 7).

Regarding claim 4, as best understood, Meucci discloses the radial segments comprise two bores, through which a coupling pin carrying the planetary gear is pushed, on the ends facing away from the axle or in a two-level configuration (arms 101 comprise two bores for a pin connecting the free wheel devices 103 to the outer radial portion of the arms 101, fig. 7).

Regarding claim 5, as best understood, Meucci discloses the radial segments comprise slots through which the pins of the rotor are guided (slots are disposed in the inner radial portion of arms 101 to guide pivots 101A, fig. 8).

Regarding claim 6, as best understood, Meucci discloses the slots of the radial segments are disposed asymmetrically such that a wider bending carrier is created in the direction of torque transmission and a flatter bending carrier in the idle direction (the slots for pivots 101A are disposed asymmetrically with respect to a line perpendicular to the axis of the body 97, fig. 8).

Regarding claim 7, as best understood, Meucci discloses the pins can rotate freely on flanges of the rotor (pivots 101A rotate freely on flanges of body 97, fig. 8) or that the contact area of the pins to the radial segments has a free rotatory design, preferably due a multi- part configuration, the pins preferably being flattened, so that a surface contact is created between the radial segments and the pins, preferably a surface contact extending across the entire surface (pivots 101A have flat ends; pivots 101A extend across the interior surface of arms 101 formed by the pivots 101A, fig. 7).

Regarding claim 8, as best understood, Meucci discloses the ring gear guides the or each tooth ring in a torsionally flexible, radial and plane parallel manner, preferably via a rubber ring (toothed rim 81 is torsionally flexible in a radial and plane parallel manner, as all materials have some degree of flexibility, fig. 7).

Regarding claim 9, as best understood, Meucci discloses a gear stage may comprise two or more parts that are disposed mutually axially offset, with adjoining

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planetary gears being part of different parts and preferably comprising separate spring systems (see fig. 8).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okano, U.S. Patent 3,359,813 – discloses a speed varying mechanism including planetary gears connected to a central rotor via radial segments (see fig. 2).

Ecaubert, U.S. Patent 582,779 – discloses a speed varying mechanism including planetary gears connected to a central rotor via radial segments (see figs. 2 and 3).

Nottle, U.S. Patent 5,360,380 – discloses a speed varying mechanism including planetary gears connected to a central rotor via radial segments (see figs. 1 and 2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIN D. BISHOP whose telephone number is 571-270-3713. The examiner can normally be reached on Monday to Thursday, 7AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Le can be reached on 571-272-7092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erin D. Bishop/
Examiner, Art Unit 3655

/David D. Le/
Primary Examiner, Art Unit 3655
09/29/2009